CLAIMS

1. An artificial vision system adapted such that a plurality of electrodes are to be implanted so as to stick in an optic papilla of an eye of a patient, a signal for stimulation pulse is generated based on an image captured by an image pickup device to be disposed outside a body of the patient, the electrodes output an electric stimulation signal based on the generated signal for stimulation pulse to stimulate an optic nerve of the eye, thereby enabling the patient to recognize the image from the image pickup device.

2. The artificial vision system according to claim 1, wherein the plurality of electrodes are to be implanted so as to individually stick in the optic papilla.

3. The artificial vision system according to claim 1 or 2 further comprising:

an external device which is to be disposed outside the body and performs predetermined optimizing processing the image captured by the image pickup device to generate the signal for stimulation pulse; and

an internal device which is to be implanted in the body and converts the signal for stimulation pulse into the electrical stimulation signal to output the electrical stimulation signal from the electrodes.

4. The artificial vision system according to claim 3, wherein the external device includes the image pickup device, an image processing device which performs the predetermined optimizing processing to generate the signal for stimulation pulse, and a power supply.

5. The artificial vision system according to claim 4, wherein

the image processing device adjusts parameters of the electrical stimulation signal to be outputted from the electrodes.

5   6. The artificial vision system according to any one of claims 3 to 5, wherein

the signal for stimulation pulse and power are transmitted from the external device to the internal device by electromagnetic induction occurring between a primary coil which is to be attached to a skin of the

10   body and a secondary coil which is to be implanted in advance in the body.